UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 155
Seattle, WA 98101-3188

ENFORCEMENT &
COMPLIANCE ASSURANCE
DIVISION

JUN 06 2019

Reply to: 20-C04

Mr. Nick DeRuyter
DeRuyter Dairy
P.O. Box 580
Marsing, Idaho 83647

Re: Clean Water Act Compliance Evaluation Inspection at DeRuyter Dairy at 4699 Buntrock Road in Marsing, Idaho.

Dear Mr. DeRuyter:

On April 2, 2019, the PG Environmental, on behalf of the United States Environmental Protection Agency (EPA), conducted a compliance inspection at your facility. The purpose of the inspection was to determine compliance with the Clean Water Act (CWA). A copy of the inspection report is attached to this letter. Please review the inspection report, note the areas of concern, if any, and take any actions necessary to ensure compliance with the CWA.

An EPA Compliance Officer will use this inspection report in evaluating your facility's compliance with the CWA. This may result in subsequent contact from EPA personnel if a violation is identified. This letter is sent only to transmit the inspection report, and it should not be interpreted as a final compliance determination. Please direct any questions regarding compliance evaluations to Steven Potokar at (206)-553-6354 or potokar.steven@epa.gov.

Thank you for the cooperation and assistance extended to the PG Environmental staff during the inspection.

Sincerely,

Jeff KenKnight

Jeff KenKnight, Chief
Surface Water Enforcement Section

Enclosure

cc: Mr. Mitch Vermeer
Idaho State Department of Agriculture

IDAHO CAFO INSPECTION REPORT

GENERAL INFORMATION

Facility ID #: N/A* – unpermitted CAFO
Facility Name: DeRuyter Dairy
Facility Owner: Nick and Suzanne DeRuyter
Facility Operator: Nick DeRuyter
Mailing Address: PO Box 580
Marsing, ID 83647
Physical Address: 4699 Buntrock Rd.
Marsing, ID 83647
County: Owyhee
Contact Person: Jake DeRuyter
Phone *(office)*: 208-896-5402
***(fax)*:** N/R* ***(cell)*:** N/R
E-mail: N/R
Persons Present During Inspection:
Jake DeRuyter (DeRuyter Dairy); Rick Naerebout, Megan Satterwhite, and Tanya Oldham (Idaho Dairymen's Association); Emily Montague and Pradip Adhikari (Idaho State Department of Agriculture [ISDA]); Tyler Fortunati and Tobby Kennedy (Idaho Department of Environmental Quality); Sirese Jacobson and Jennifer Ferrando (PG Environmental).

Inspectors: Sirese Jacobson and Jennifer Ferrando (PG Environmental)
Inspection Date: April 2, 2019
Time In: 11:00 AM
Time Out: 1:45 PM
Weather: Cloudy with light drizzle.
GPS Reading (At Gate)
North: 43.57269
West: -116.85226

Does the facility owner/operator own and/or operate any other animal feeding operations?
Yes
If yes provide name(s) and address(es) and indicate whether the facility is an AFO or a CAFO:
The DeRuyters operate 2 other dairy facilities in Idaho (addresses and AFO/CAFO status N/R).

Max. Animals Confined per Month: Approx. 8,900
Max. Capacity of Facility: Permitted through ISDA for 10,780 animal units (AUs)

Location and name of nearest surface water[1] and description of flow path:
DeRuyter Dairy is approximately 0.8 miles south of the Snake River. An irrigation canal borders the southwest portion of the production area. Based on a review of aerial imagery and discussion with the facility representatives, it appears that the irrigation canal flows to the Snake River.

Number of animals today (all animals in production area):

	# confined		# confined
Cattle		**Sheep**	
Dairy mature	6,400	**Dairy heifers**	500
Swine (≥55#)		**Swine (<55#)**	
Turkeys		**Laying hens**	
Other chickens		**Other (specify)**	1,500 – 2,000 calves

X	**Presented credentials? (check if yes)** Presented Letter of Authorization dated March 26, 2019
X	**Inspection photos or site map/aerial photo attached? (check if yes)**
X	**Potential compliance issues? (check if yes and summarize below)**

*NA = Not Applicable; NR = Not Requested

Note: The federal regulations cited throughout the checklist are included as reference for discharging CAFOs.

[1] Surface water means all waters of the United States.

SUMMARY OF POTENTIAL COMPLIANCE ISSUES

- The facility's NMP did not include site-specific conservation practices; however, the facility representatives specified that they turn off the end guns on pivots when applying wastewater near roads and ditches, and use drop hoses with low pressure nozzles on the pivots that are below the top of the berm along the irrigation canal. It is recommended that the facility's NMP be updated to include site-specific conservation practices. For discharges from the land application area to Waters of the U.S. to meet the agricultural storm water definition, federal regulations at 40 CFR 122.23(e)(1) require documentation of site-specific conservation practices to prevent the runoff of pollutants from land application areas.
- The berm that prevents runoff from flowing into the downgradient irrigation canal along the southwest boundary of the southern corrals was in need of maintenance. The berm was uneven and appeared to be uncompacted in some areas. It is recommended that the facility operator perform the necessary construction or repairs to ensure the berm can prevent cattle pen runoff from entering the irrigation canal, which is tributary to the Snake River. This action is required to ensure the facility does not have an unpermitted discharge to Waters of the U.S.
- The facility was using several fields for land application that were not included in the facility's NMP. It is recommended that the facility's NMP be updated to include the new fields, and that the facility operator ensure and document that the facility is land applying manure/wastewater to those fields in accordance with its NMP. The NMP must include all fields that receive manure or wastewater for discharges of stormwater runoff from land application areas to a Waters of the U.S. to meet the agricultural stormwater definition.
- The facility's records did not include solid manure land application amounts or calculations of pounds of nutrients applied. It is recommended that the facility operator maintain complete land application documentation to demonstrate that it is land applying nutrients in accordance with its NMP, and that discharges from the land application area to Waters of the U.S. meet the agricultural stormwater definition.
- During the site tour, the inspectors observed little to no freeboard at the northwest corner of the Main Lagoon. Although it appeared that an overflow from this lagoon would flow into the West Drying Yard (Compost 2) area, which drains to the Compost 2 Runoff Catch Basin, it is recommended that the lagoon be pumped down to maintain at least two feet of freeboard.
- The available storage capacity information in the facility's NMP did not reflect current site conditions. The NMP indicated that the facility has approximately double the required storage capacity, but the Compost 2 Runoff Catch Basin was not listed in the NMP's waste storage summary table. It is recommended that the facility's NMP be updated to include all waste storage structures.
- The NMP information supporting calculations for required storage capacity was not clear. The annual recommended storage requirements listed in the NMP were very close in value to the 180-day storage requirements for the following areas that contribute storm runoff to impoundments: Compost 1 and Compost 2 drying areas, Heifer Calf Lots. It was unclear why the annual and 180-day storage estimates were so similar as some amount of runoff from these areas would be expected for most months in an average year. It is recommended that the facility operator check or clarify these storage capacity values in the NMP.

INSPECTION OBSERVATIONS

Nutrient Management Plan (NMP)

Required NMP Element [40 CFR 122.42(e)(1)]

Indicate whether the following elements are included in the NMP:

Yes 1. Is the facility's NMP available on-site? Does it reflect the current operational characteristics and practices? [40 CFR 122.42(e)(2)(ii)]

Date developed or last revised: August 8, 2016

All statements about the NMP in this report refer to the August 8, 2016, version of the NMP. The NMP was developed by ISDA using Idaho OnePlan.

The facility acquired new fields in 2018 that were not reflected in the 2016 NMP. The inspectors recommended that the NMP be revised to include these new fields to ensure and document that manure and wastewater are being applied to these fields in accordance with the facility's approved NMP. Inclusion of all land application sites in the NMP is necessary for discharges from the land application area to Waters of the U.S. to meet the agricultural stormwater definition.

No 2. Ensure adequate storage of manure and process wastewater, including operation and maintenance procedures. [40 CFR 122.42(e)(1)(i)]
The NMP indicated that the facility has adequate storage capacity, but the information was unclear and should be revised. The NMP identifies individual storage structures and capacities. Data provided in the NMP indicates that the facility has approximately two times more wastewater storage capacity than required. However, the annual recommended storage requirement for runoff from several areas (Compost 1, Compost 2, and Heifer Calf Lots) was nearly the same as the 180-day storage requirement for those areas, implying minimal storm runoff from those areas for a six-month period. In addition, the NMP did not include the Compost 2 Runoff Catch Basin in the storage capacity calculations. The inspectors recommended that the NMP be revised to include all impoundments and to clarify the recommended storage capacity calculations. This NMP element is not required for unpermitted CAFOs under the Clean Water Act.

No 3. Ensure proper management of animal mortalities. [40 CFR 122.42(e)(1)(ii)]
The facility's NMP does not address animal mortality management. According to Mr. DeRuyter, mortalities are temporarily stored near the Concrete Pit until picked up by Darling International for rendering. This NMP element is not required for unpermitted CAFOs under the Clean Water Act.

N/A 4. Ensure that clean water is diverted, as appropriate, from the production area. [40 CFR 122.42(e)(1)(iii)]
Based on information provided by the facility representative and site observations, localized topography would prevent run-on to the production area. This NMP element is not required for unpermitted CAFOs under the Clean Water Act.

N/A 5. Prevent direct contact of confined animals with surface waters. [40 CFR 122.42(e)(1)(iv)]
Surface waters do not flow through any portion of the production area. The southwest corrals are separated from the adjacent irrigation canal by a fence and a road. This NMP element is not required for unpermitted CAFOs under the Clean Water Act.

Nutrient Management Plan (NMP) (continued)

No 6. Ensure proper disposal of chemicals and other contaminants. [40 CFR 122.42(e)(1)(v)]
Chemicals used on site include disinfectants for foot baths located on both sides of the milk barn. This NMP element is not required for unpermitted CAFOs under the Clean Water Act.

NOTE: Unpermitted CAFOs with agricultural stormwater runoff are required to implement the following nutrient management planning elements (7 – 10) to qualify for the agricultural stormwater exemption [40 CFR 122.23(e)]

No 7. Identify site-specific conservation practices to control runoff of pollutants. [40 CFR 122.42(e)(1)(vi)]
According to Mr. DeRuyter, the following practices are used to prevent nutrient loss from land application areas: a berm is maintained by the Irrigation District along the irrigation canal, the facility uses drop hoses with low-pressure nozzles that are set below the top elevation of the berm, the facility uses end guns on pivots only for clean irrigation water and the end guns do not reach the irrigation canal. The NMP does not reflect the facility's conservation practices in use.

No 8. Identify protocols for manure, process wastewater, and soil sampling and testing. [40 CFR 122.42(e)(1)(vii)]
The NMP includes protocols for soil testing but not compost and wastewater testing. Wastewater and composted manure are applied to land application sites under the operational control of DeRuyter Dairy. Unpermitted CAFOs with agricultural stormwater runoff must implement protocols for appropriate manure, process wastewater, and soil testing and maintain associated records to qualify for the agricultural stormwater runoff exemption under the Clean Water Act.

Yes 9. Establish protocols to land apply manure or process wastewater in accordance with site-specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients in the manure, litter, or process wastewater. [40 CFR 122.42(e)(1)(viii)]
The facility's NMP was developed using Idaho OnePlan. Provided the software addresses all necessary considerations and data elements to ensure calculation of land application rates that ensure appropriate agricultural utilization of the applied manure and wastewater, this nutrient management planning requirement is satisfied.

No 10. Identify specific records that will be maintained to document the implementation and management of the minimum NMP elements (#2-#9 above). [40 CFR 122.42(e)(1)(ix)]
The NMP does not identify the site-specific records that will be maintained to document the NMP elements listed above. See question 33 below for a description of the facility's record keeping specific to the nutrient management planning elements that apply to unpermitted CAFOs in the context of the Clean Water Act agricultural stormwater exemption (#7-#9 above).

Nutrient Management Plan (NMP) (continued)

Additional NMP Requirements for Large Dairy Cow, Cattle, Swine, Poultry, and Veal Calf CAFOs

Yes 11. Application rates are calculated as required by 40 CFR 412.4(c)(2).
The NMP was developed using Idaho OnePlan. Provided the software addresses field-specific risk of nitrogen and phosphorus transport to surface waters; the form, source, amount, timing, and method of nutrient application to achieve realistic yield goals; and consideration of multi-year phosphorus application, the rates in the plan were calculated in accordance with the referenced requirements.

No 12. Specifies the manure, process wastewater, and soil sampling at the required frequencies and for the required parameters? [40 CFR 412.4(c)(3)] *(manure/wastewater annually for P & N, soils at least every 5 years for phosphorus transport)*
The NMP specifies soil sampling twice per year but does not specify frequencies for manure and wastewater sampling. Mr. DeRuyter stated that soils and manure are sampled twice annually; he was not sure whether wastewater is sampled and suggested that book values had been used for the calculations in the NMP. This NMP element is not required for unpermitted CAFOs under the Clean Water Act; however, unpermitted CAFOs with agricultural stormwater runoff must implement protocols for appropriate manure, process wastewater, and soil testing and maintain associated records to qualify for the agricultural stormwater runoff exemption under the Clean Water Act.

No 13. Includes periodic inspection of land application equipment? [40 CFR 412.4(c)(4)]
The NMP does not address land application equipment inspection. The facility representative indicated that land application equipment is regularly calibrated and inspected for leaks. This NMP element is not required for unpermitted CAFOs under the Clean Water Act.

No 14. Includes 100-foot setback or 35-foot vegetated buffer, or approved alternative? [40 CFR 412.4(c)(5)]
Review of aerial imagery and Idaho Department of Water Resources' interactive maps indicates that the irrigation canal bordering the facility and several of the land application fields flows to the Snake River. The facility's NMP does not identify site-specific conservation practices; however, Mr. DeRuyter stated that the end guns on the pivots are not used when irrigating wastewater. In addition, the canal is bermed and the drop hoses on the pivots are below the top elevation of the berm.

Where applicable, identify each field and setback type:

Field ID	Setback Type
Pivot fields adjacent to irrigation canal	End guns not used for wastewater irrigation, drop hoses below berm height

Monitoring, Documentation and Recordkeeping

Does the facility maintain the following records?

N/A 15. The completed permit application? [40 CFR 412.37(b)]
DeRuyter Dairy is an unpermitted CAFO.

No 16. The current design of manure storage structures, including volume of solids accumulation, design treatment volume, total design volume, and approximate number of days of storage capacity? [40 CFR 412.37(b)(5)]
The facility's NMP includes design information for all impoundments except the Compost 2 Runoff Catch Basin. This documentation is not required for unpermitted CAFOs under the Clean Water Act; however, the inspectors recommended that the facility's NMP be updated to include all waste storage structures.

N/A 17. The date, time, and estimated volume of any overflow? [40 CFR 412.37(b)(6)]
According to Mr. DeRuyter, there have been no overflows from the impoundments at DeRuyter Dairy. The inspectors did not identify evidence of overflows during the site evaluation.

No 18. Manure and process wastewater transfers, including the most current nutrient analysis of the manure or wastewater that was provided to the recipient, the date and approximate amount transferred, and the name and address of the recipient? [40 CFR 122.42(e)(3)]

Yes a. Name of recipient

Yes b. Address of recipient

Yes c. Date of transfer

Yes d. Approximate amount transferred (tons/gallons)

No e. Recent (12 months or less) manure nutrient analysis provided

Wastewater and manure are applied to land application sites at DeRuyter Dairy. Manure and wastewater are also transferred to third-party farmers. The facility documents the information listed above but does not provide the results of nutrient analyses to the third-party farmers. Manure transfer records include the recipient's last name, the destination field, the volume of slurry hauled, the number of loads of solid manure hauled, equipment used for hauling (enabling calculation of the volume of solid manure hauled), and the hauling date. The addresses of exported manure recipients are listed in the facility's NMP. This documentation is not required for unpermitted CAFOs under the Clean Water Act.

Additional Production Area Records for Large Dairy Cow, Cattle, Swine, Poultry, and Veal Calf CAFOs

No 19. Documentation of daily and weekly visual inspections of the production area, including:

No a. Weekly inspection of stormwater diversions, waste storage structures, and process wastewater channeling devices? [40 CFR 412.37(b)(1)]

No b. Daily inspection of water lines? [40 CFR 412.37(b)(1)]

Monitoring, Documentation and Recordkeeping (continued)

No — c. Weekly inspection of impoundments and tanks? [40 CFR 412.37(b)(1)]

The facility representative indicated that the above items are inspected at least weekly during routine operations in the production area; however, the visual inspections are not documented. This documentation is not required for unpermitted CAFOs under the Clean Water Act.

No — 20. Weekly records of the depth of manure and process wastewater in liquid impoundments and terminal tanks? [40 CFR 412.37(b)(2)]
The facility representative indicated that lagoon wastewater levels are evaluated during routine operations in the production area. The lagoons do not include depth markers and the facility does not document freeboard or any other indicator of wastewater levels in the impoundments. This documentation is not required for unpermitted CAFOs under the Clean Water Act.

No — 21. Documentation of actions taken to correct deficiencies found as a result of production area inspections? [40 CFR 412.37(b)(3)]
Documentation of actions taken to correct deficiencies was not included in the records reviewed. This documentation is not required for unpermitted CAFOs under the Clean Water Act.

Yes — 22. Documentation of mortalities management? [40 CFR 412.37(b)(4)]
Mortalities are picked up by Darling International for rendering. The facility maintains hauling invoices that document the dates removed and the number of animals picked up. This documentation is not required for unpermitted CAFOs under the Clean Water Act.

Land Application Area Records for Large Dairy Cow, Cattle, Swine, Poultry, and Veal Calf CAFOs

Yes — 23. Expected crop yields? [40 CFR 412.37(c)(1)]
Expected crop yields are included in the facility's NMP. These records may be required for unpermitted CAFOs under the Clean Water Act, to the extent that they are necessary to demonstrate land application of manure or process wastewater in accordance with site-specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients in the manure or process wastewater.

Yes — 24. Date(s) manure or process wastewater is applied to each land application site? [40 CFR 412.37(c)(2)
These records may be required for unpermitted CAFOs under the Clean Water Act, to the extent that they are necessary to demonstrate land application of manure or process wastewater in accordance with site-specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients in the manure or process wastewater.

No — 25. Weather conditions at the time of, and for 24 hours prior to and following, land application? [40 CFR 412.37(c)(3)]
These records are not specifically required for unpermitted CAFOs under the Clean Water Act but may be useful to demonstrate land application of manure or process wastewater in accordance with site-specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients in the manure or process wastewater.

Monitoring, Documentation and Recordkeeping (continued)

No 26. Test methods used to sample and analyze manure, process wastewater, and soil? [40 CFR 412.37(c)(4)]
These records are not specifically required for unpermitted CAFOs under the Clean Water Act but may be useful to demonstrate land application of manure or process wastewater in accordance with site-specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients in the manure or process wastewater.

No 27. Results from manure, process wastewater, and soil analyses? [40 CFR 412.37(c)(5)]
Analytical results for soil and solid manure sampling were included in the facility records. Mr. DeRuyter was not sure whether wastewater is sampled and suggested that book values had been used for the calculations in the NMP. These records may be required for unpermitted CAFOs under the Clean Water Act, to the extent that they are necessary to demonstrate land application of manure or process wastewater in accordance with site-specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients in the manure or process wastewater. Mr. DeRuyter stated that he relies on post-harvest soil sampling to evaluate whether land application was conducted at appropriate rates, based on whether phosphorus is building up in the soil. Note, however, that this method would only detect overapplication after the fact rather than preventing overapplication. In addition, the phosphorus buffering capacity of some soils could mask overapplication of manure and wastewater for several years before soil test phosphorus increases. Finally, this method does not evaluate whether compost and wastewater application exceeded the crop's nitrogen recommendation.

Yes 28. Manure and process wastewater application rates determined in accordance with the technical standards? [40 CFR 412.37(c)(6)]
Planned rates are calculated using Idaho OnePlan.

Yes 29. Calculations showing the total N and P to be applied to each land application site, including sources other than manure or process wastewater? [40 CFR 412.37(c)(7)]
The planned rates in the NMP were calculated using Idaho OnePlan. The inspectors did not evaluate the software, but presume, based on the information provided in the NMP, that the software calculates planned nutrient application rates based on crop nutrient needs, soil credits, and other nutrient inputs, and converts those rates to the tons or gallons to be applied based on the manure analysis data.

Monitoring, Documentation and Recordkeeping (continued)

No 30. Total amount of N and P actually applied to each land application site, including calculations? [40 CFR 412.37(c)(8)]
The facility's records for compost and wastewater application included the application date, field, number of loads, equipment/machinery used to haul manure/wastewater, and manure type. For solid manure, this information could be used in conjunction with the manure analysis results to calculate the amount of N and P applied for comparison with the planned nutrient application rates in the NMP. This would not be possible for wastewater as the facility had not been testing wastewater. The inspectors recommended that the facility operator also include in the land application records the tons or gallons of manure applied and/or pounds of nutrients applied. Records of the total amount of N and P applied to each field are not specifically required for unpermitted CAFOs under the Clean Water Act but may be useful to demonstrate land application of manure or process wastewater in accordance with site-specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients in the manure or process wastewater.

No 31. Method used to apply manure and process wastewater? [40 CFR 412.37(c)(9)]
Mr. DeRuyter stated that the application method is dictated by the manure type. For example, all slurry is surface-applied using a tank spreader followed by disking. Wastewater is applied through pivot sprinklers. The inspectors did not document the method of compost application. These records are not specifically required for unpermitted CAFOs under the Clean Water Act but may be useful to demonstrate land application of manure or process wastewater in accordance with site-specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients in the manure or process wastewater.

No 32. Date(s) of manure application equipment inspections for leaks? [40 CFR 412.37(c)(10)]
These records are not required for unpermitted CAFOs under the Clean Water Act.

33. Describe the records that are maintained to document implementation of the following nutrient management planning elements [40 CFR 122.23(e)]:
    a. Identify site-specific conservation practices to control runoff of pollutants.
    According to the facility representative, site specific conservation practices used at the facility include drop hoses with low pressure nozzles on pivots, turning off end guns on pivots when irrigating with wastewater, and a berm along the irrigation canal maintained by the Irrigation District. These conservation practices are not documented in the NMP. These records are required for unpermitted CAFOs with agricultural stormwater runoff to qualify for the agricultural stormwater exemption under the Clean Water Act.

    b. Identify protocols for manure, process wastewater, and soil sampling and testing.
    The facility maintains laboratory analytical reports for soil and compost testing but was not testing wastewater. These records are required for unpermitted CAFOs with agricultural stormwater runoff to qualify for the agricultural stormwater exemption under the Clean Water Act.

Monitoring, Documentation and Recordkeeping (continued)

c. Establish protocols to land apply manure or process wastewater in accordance with site-specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients in the manure, litter, or process wastewater.
The facility records included information that would support calculation of the amount of nutrients applied from solid manure for comparison with the NMP but did not have complete information (i.e., analytical results) to support such a comparison for wastewater applications. These records are required for unpermitted CAFOs with agricultural stormwater runoff to qualify for the agricultural stormwater exemption under the Clean Water Act.

Monitoring, Documentation and Recordkeeping comments:
The inspectors did not conduct the necessary calculations to compare solid manure application records (documented in loads hauled) to planned rates in the NMP (expressed in pounds of nutrients to be applied).

Land Application Sites

Yes 34. Does the facility apply manure or wastewater to land owned by or under the operational control of the CAFO?

- Number of land application sites: Number of sites not documented. The facility's NMP indicates that approximately 6,800 acres are available for land application of manure and wastewater from DeRuyter Dairy (nearly 4,000 owned by the dairy and more than 2,800 through third-party export).
- Irrigation type(s): Pivot
- Furrow/flood irrigation sites – what is fate of applied wastewater and tailwater? N/A

Production Area

35. List impoundments

Impoundment ID	Wastewater Type	Wastewater Source(s)	Pumping level[2]	Wastewater below pumping level?	Max. recorded level	Date of max. recorded level
Concrete Pit	☒ process generated ☒ runoff	Milking parlor, freestalls, and runoff from corrals	N/A	N/A	N/A	N/A
4-Cell Concrete Separator	☒ process generated ☒ runoff	Concrete Pit (via Mechanical Separator)	N/A	N/A	N/A	N/A
Separator Pond	☒ process generated ☒ runoff	4-Cell Concrete Separator	N/A	N/A	N/A	N/A
Lagoon 2	☒ process generated ☒ runoff	Separator Pond	N/A – not required for unpermitted CAFOs under the Clean Water Act	N/A	N/A	N/A
Main Lagoon	☒ process generated ☒ runoff	Lagoon 2		N/A Minimal freeboard during inspection	N/A	N/A
Mixing Pond	☒process generated ☒ runoff	Main Lagoon		N/A	N/A	N/A
Berming Compost 1 (Compost 1 Runoff Catch Basins)	☐ process generated ☒ runoff	Runoff from Compost 1 and feed storage		N/A	N/A	N/A
Runoff Pond	☒ process generated ☒ runoff	Runoff from calf hutches, slurry from freestalls		N/A	N/A	N/A
Compost 2 Runoff Catch Basin	☐ process generated ☒ runoff	Runoff from Compost 2		N/A	N/A	N/A

[2] The pumping level represents the minimum capacity necessary to contain runoff and direct precipitation from the 25-year, 24-hour rainfall event (40 CFR 40 CFR 412.37(a)(2)).

Production Area (continued)

36. Impoundment(s) collect all runoff from:

No Animal confinement areas? [3]
According to the facility representatives, runoff from the southwest corrals is retained by a berm that runs along the southwest boundary of the corrals. The inspectors observed that the berm was eroded in places and appeared to be in need of reconstruction or repair to ensure runoff would be retained. The inspectors recommended that the facility operator conduct the necessary repairs to ensure that process wastewater cannot exit the corrals and enter the adjacent irrigation canal.

Yes Manure storage areas?[4]
Runoff from the Compost 1 drying area flows to a catch basin (identified as "Berming Compost 1" in the NMP) at the southeast corner of the composting area. Runoff from the Compost 2 drying area flows to a catch basin at the northwest corner of the Compost 2 drying area; however, that catch basin was not included in the NMP. The inspectors recommended that the NMP be revised to include the Compost 2 Runoff Catch Basin.

Yes Raw material storage areas?[5]

Yes Waste containment areas?[6]

N/A Egg washing or egg processing facility?

Yes Mortality storage, handling, treatment or disposal area?

N/A Other? (describe): N/A

No 37. Was manure or wastewater observed in a waterway? If yes, describe: N/A

Yes 38. Adequate storage available for manure, litter, and process wastewater, and procedures are in place to ensure proper operation and maintenance of the storage facilities? [40 CFR 122.42(e)(1)(i)]
Although the Main Lagoon (Photograph 1) and Runoff Pond were full, no evidence of manure or wastewater spills or overflow was observed. However, the conditions on site did not appear to support NMP calculations indicating that the facility maintains double the amount of storage capacity required. Note that the area had unusually wet conditions in February 2019 and the facility had not yet begun spring dewatering.

Yes 39. Confined animals do not have direct contact with waters of the United States? [40 CFR 122.42(e)(1)(iv)]
Waters of the U.S. do not flow through the animal confinement areas.

[3] Animal confinement area includes but is not limited to open lots, housed lots, feedlots, confinement houses, stall barns, free stall barns, milkrooms, milking centers, cowyards, barnyards, medication pens, walkers, animal walkways, and stables (40 CFR 40 CFR 122.23(b)(8)).

[4] Manure storage area includes but is not limited to lagoons, runoff ponds, storage sheds, stockpiles, under house or pit storages, liquid impoundments, static piles, and composting piles (40 CFR 40 CFR 122.23(b)(8)).

[5] Raw materials storage area includes but is not limited to feed silos, silage bunkers, and bedding materials (40 CFR 40 CFR 122.23(b)(8)).

[6] The waste containment area includes but is not limited to settling basins, and areas within berms and diversions which separate uncontaminated storm water (40 CFR 40 CFR 122.23(b)(8)).

Production Area (continued)

N/A 40. Clean water is diverted from the production area? [40 CFR 122.42(e)(1)(iii)]
Based on information provided by the facility representative and site observations, localized topography would prevent run-on to the production area.

Yes 41. Chemicals and other contaminants handled on-site are not disposed of in any manure, litter, process wastewater, or storm water storage or treatment system? [40 CFR 122.42(e)(1)(v)]
The inspectors did not specifically evaluate the facility's chemical storage area or procedures but did not identify evidence of improper chemical disposal.

Additional Production Area Requirements for Large Dairy Cow, Cattle, Swine, Poultry, and Veal Calf CAFOs (Subparts C and D)

No 42. All open surface impoundments and terminal storage tanks have depth markers which clearly indicate the minimum capacity necessary to contain the runoff and direct precipitation of the 25-year, 24-hour rainfall event? [40 CFR 412.37(a)(2)]
Depth markers are not required for unpermitted CAFOs under the Clean Water Act.

Yes 43. Mortalities remain in the production area until disposal, are not disposed in liquid manure or process wastewater treatment systems, and are handled to prevent discharge of pollutants to surface waters? [40 CFR 412.37(a)(4)]
Mortalities are stored temporarily on site prior to pick up by the renderer. The mortality storage location is near the Concrete Pit; runoff from this area drains to the Concrete Pit.

Production area comments:
Wastewater from the milking parlor and runoff from the northern corrals flows to the Concrete Pit. Wastewater is pumped from the Concrete Pit to the mechanical separator. Solids from the mechanical separator are composted and separated wastewater flows to the 4-Cell Concrete Separator and then to the Separator Pond, Lagoon 2, and the Main Lagoon, in series. Wastewater from the Main Lagoon is mixed with fresh water in the irrigation pond prior to land application.

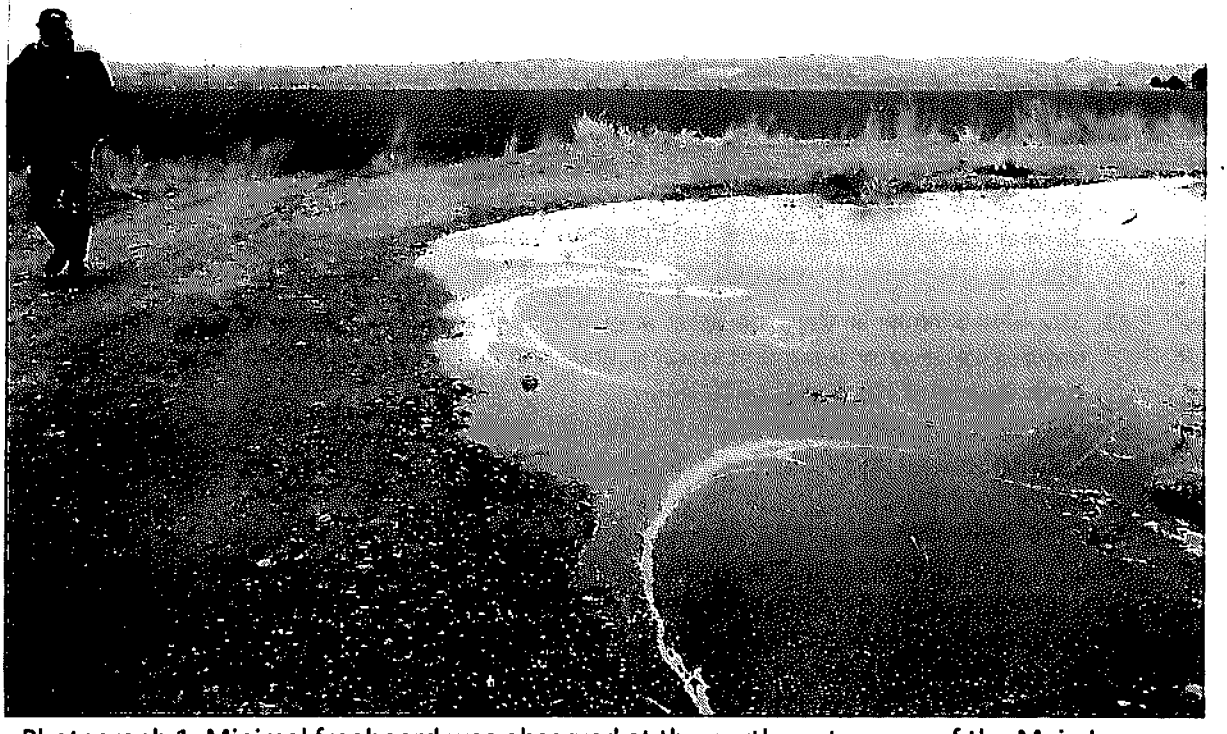
The inspectors observed little to no freeboard at the northwest corner of the Main Lagoon (Photograph 1). Although it appeared that an overflow from this lagoon would flow into the Compost 2 area, which drains to the Compost 2 Runoff Catch Basin, the inspectors recommended that the facility operator pump down the lagoon to maintain at least two feet of freeboard.

Runoff from the feed and commodities storage area flows to the Compost 1 Catch Basin, along with runoff from the Compost 1 drying area. Runoff from the Compost 2 drying area flows to the catch basin at the northwest corner of the Compost 2 drying area.

Slurry is removed from the freestalls using a honey vac and hauled directly to the land application sites. During wet conditions, slurry from the freestalls is stored in the high-density polyethylene (HDPE)-lined Runoff Pond located north of the calf hutches. The Runoff Pond also receives runoff from the calf hutches. Due to recent wetter-than-normal conditions, the Runoff Pond was full (approximately 2 feet of freeboard remaining) at the time of the inspection. It appeared that overflows from the Runoff Pond would back up into the calf hutch area.

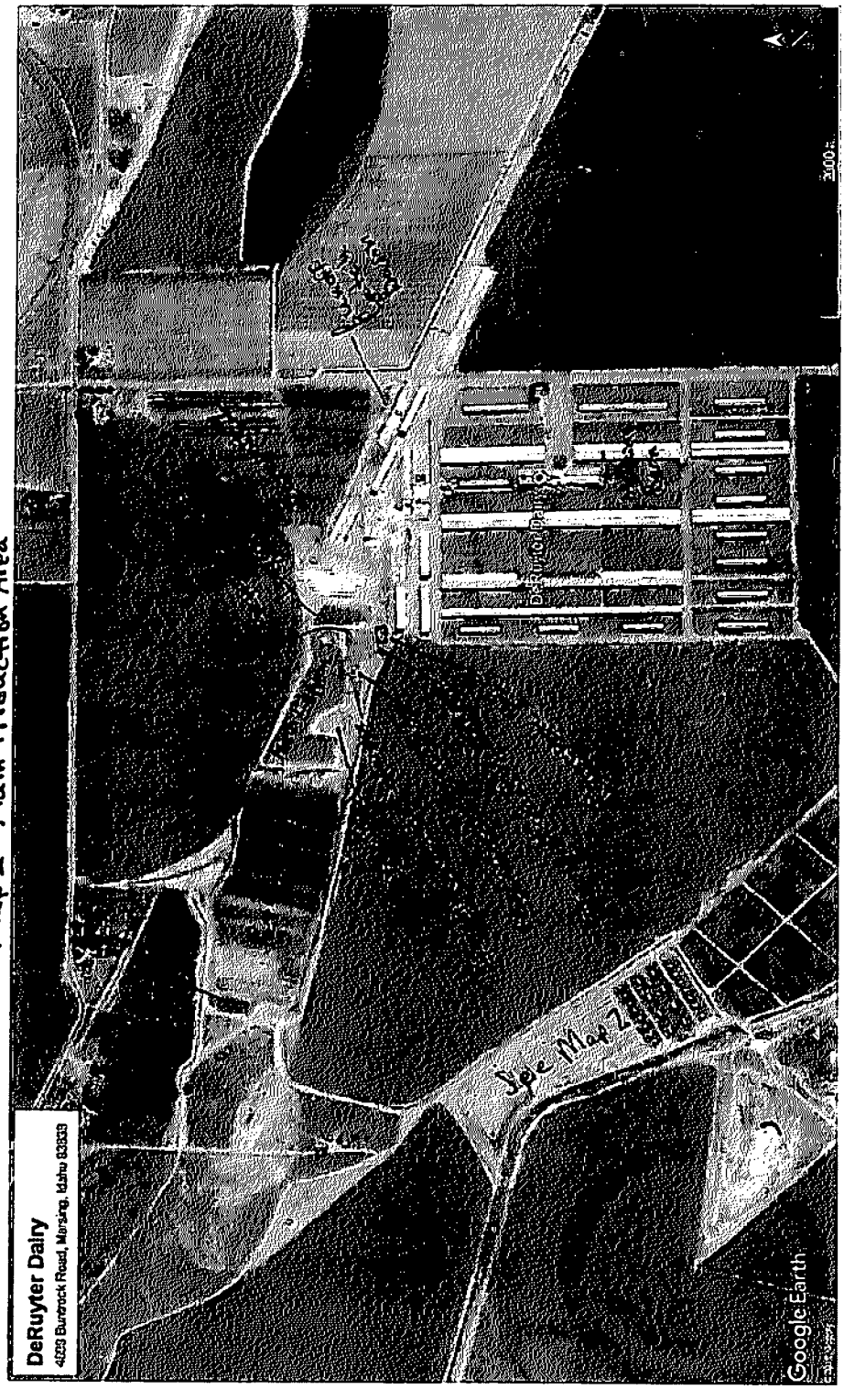
Inspector: Jennifer Fernandez **Date:** 5 | 30 | 2019

Idaho CAFO Inspection – Photograph Log: DeRuyter Dairy



Photograph 1. Minimal freeboard was observed at the northwest corner of the Main Lagoon (view looking north). It appeared that overflows from the Main Lagoon would occur at this point and flow west into the Compost 2 drying area.

Aerial Photo/Site Map



DeRuyter Dairy Map 2 - Southwest Production Area